

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) An acoustic apparatus for producing audio signals,
wherein in which the sound transducer and the at least one sound emergence location are physically separate from one another,
in which the sound transducer is connected to the sound emergence location by means of at least one air-guiding sound conduit line (conduit),
and wherein in which the at least one sound emergence location is provided with a means for achieving acoustic impedance matching for the air in the sound conduit line and the ambient air in order to reduce resonance effects,
wherein the means for acoustic resonance matching is made of a material which has the acoustic impedance of air, and
wherein this material is placed in two dimensions (planar, along the surface) and contiguously exclusively (coherently) over the at least one sound emergence location.
2. (currently amended) The acoustic apparatus as claimed in claim 1, wherein the material which has the acoustic impedance of air is a fibrous and/or porous material with an acoustic impedance in the order of 41.4 rayl.
3. (currently amended) The acoustic apparatus as claimed in claim 1 wherein the apparatus has at least two sound conduits lines, where the sound emerging jointly from the sound conduit lines has a high sound level through superimposition in a preferred direction and has a lower sound level in an unwanted direction as a result of the design of the sound conduit line and/or as a result of the manner in which the sound is supplied by the sound transducer.
4. (currently amended) The acoustic apparatus as claimed in claim 3, wherein the sound emergence locations of the individual sound conduit lines are arranged relative to one another such that a flat radiating element is produced.

5. (currently amended) An The acoustic apparatus as claimed in claim 5 for producing audio signals,
in which the sound transducer and the at least one sound emergence location are physically separate from one another,
in which the sound transducer is connected to the sound emergence location by means of at least one air-guiding sound conduit,
and in which the at least one sound emergence location is provided with a means for achieving acoustic impedance matching for the air in the sound conduit and the ambient air in order to reduce resonance effects,
and the means for acoustic resonance matching is made of a material which has the acoustic impedance of air,
wherein this material is placed in two dimensions and contiguously over the at least one sound emergence location,
wherein the apparatus has at least two sound conduits, where the sound emerging jointly from the sound conduits has a high sound level through superimposition in a preferred direction and has a lower sound level in an unwanted direction as a result of the design of the sound conduit and/or as a result of the manner in which the sound is supplied by the sound transducer,
wherein the sound emergence locations of the individual sound conduits are arranged relative to one another such that a flat radiating element is produced, and
wherein the flat radiating element comprises individual conventional loudspeakers in addition to the sound emergence locations of the individual sound conduits lines.
6. (previously presented) The acoustic apparatus as claimed in claim 5, wherein the conventional loudspeakers used are small tweeters, which are suitable for radiating the high frequencies within the audible frequency range.
7. (currently amended) An The acoustic apparatus as claimed in claim 1 for producing audio signals,

in which the sound transducer and the at least one sound emergence location are physically separate from one another,

in which the sound transducer is connected to the sound emergence location by means of at least one air-guiding sound conduit,

and in which the at least one sound emergence location is provided with a means for achieving acoustic impedance matching for the air in the sound conduit and the ambient air in order to reduce resonance effects,

and the means for acoustic resonance matching is made of a material which has the acoustic impedance of air,

wherein this material is placed in two dimensions and contiguously over the at least one sound emergence location, and

wherein to produce acoustic directivity the sound emergence locations are firstly arranged like a flat panel loudspeaker, but secondly directivity is also obtained through antiphase cancellation.

8. (currently amended) An The acoustic apparatus as-claimed-in-claim-1 for producing audio signals,

in which the sound transducer and the at least one sound emergence location are physically separate from one another,

in which the sound transducer is connected to the sound emergence location by means of at least one air-guiding sound conduit,

and in which the at least one sound emergence location is provided with a means for achieving acoustic impedance matching for the air in the sound conduit and the ambient air in order to reduce resonance effects,

and the means for acoustic resonance matching is made of a material which has the acoustic impedance of air,

wherein this material is placed in two dimensions and contiguously over the at least one sound emergence location, and

wherein the sound transducer used is an isobaric push/pull system.

9. (previously presented) The acoustic apparatus as claimed in claim 1 wherein the sound emergence locations are placed in the headrests of a vehicle seat, and the sound transducers are located outside of the headrests.
10. (previously presented) The acoustic apparatus as claimed in claim 9, wherein the support rods of the headrests are used for acoustic sound transmission.
11. (previously presented) The acoustic apparatus as claimed in claim 2, wherein the material which has the acoustic impedance of air is felt, sponge material, unwoven fabric or felt metal.
12. (new) The acoustic apparatus as claimed in claim 11, wherein the thickness of the felt metal is in the order of magnitude of 1 mm.
13. (new) The acoustic apparatus as claimed in claim 1, wherein said at least one air-guiding sound conduit has a length of up to 1 meter.